# U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

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Sulfur, monthly

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#### **SULFUR IN MAY 1996**

During the month, production of combined Frasch and recovered elemental sulfur was 889,000 metric tons, according to the U.S. Geological Survey. May production was 2% higher than that of April 1996, and slightly lower than that of May 1995. Shipments of these combined products were 4% lower than those of April 1996.

Import and export data for May 1996 were not available at the time of publication. Import/export data and apparent consumption for May 1996 will be published in the June 1996 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for April 1996 were 119,000 tons. Exports of sulfur, for the same period, were 120,000 tons. Imports of sulfuric acid for April 1996 were 202,000 tons; exports were 7,000 tons.

## TABLE 1 SALIENT SULFUR STATISTICS 1/

## (Thousand metric tons)

	Shipments			
Frasch 2/	Petroleum 3/	Natural gas	Total	all sources 4/
759	5,020	4,580	10,400	10,700
759	2,020	1,440	4,220	4,500
W	448	447 4/	895	938
$\mathbf{W}$	415	424 4/	839	896
W	443	460 4/	903	910
W	411	448 4/	859	912
$\mathbf{W}$	425	464 4/	889	851
W	431	420 4/	851	842
$\mathbf{W}$	434	459 4/	893	905
W	443	460 4/	903	917
$\mathbf{W}$	433	449 4/	882	884
$\mathbf{W}$	406	419 4/	825	815
$\mathbf{W}$	430	424 4/	854	835
$\mathbf{W}$	449 r/	423 r/ 4/	872 r/	898 r/
W	467 p/	422 p/ 4/	889 p/	863 p/
W	2,190 p/	2,140 p/	4,320 p/	4,300 p/
	759 759 759 W W W W W W W W W W	Frasch 2/ Petroleum 3/ 759 5,020 759 2,020  W 448 W 415 W 443 W 411 W 425 W 431 W 434 W 443 W 443 W 4443 W 445 W 45 W 47 W 47 W 466 W 467 W 467 p/ W 2,190 p/	759 5,020 4,580 759 2,020 1,440  W 448 447 4/ W 415 424 4/ W 443 460 4/ W 411 448 4/ W 425 464 4/ W 431 420 4/ W 434 459 4/ W 443 460 4/  W 443 460 4/  W 430 444 4/ W 449 r/ 423 r/4/ W 467 p/ 422 p/4/ W 2,190 p/ 2,140 p/	Frasch 2/         Petroleum 3/         Natural gas         Total           759         5,020         4,580         10,400           759         2,020         1,440         4,220           W         448         447 4/         895           W         415         424 4/         839           W         443         460 4/         903           W         425         464 4/         889           W         431         420 4/         851           W         434         459 4/         893           W         443         460 4/         903           W         433         449 4/         882           W         430         424 4/         854           W         449 r/         423 r/4/         872 r/           W         467 p/         422 p/4/         889 p/           W         2,190 p/         2,140 p/         4,320 p/

TABLE 2 U.S. IMPORTS OF SULFUR 1/

# (Thousand metric tons and thousand dollars)

	Ca	nada	Me	exico	Total, all countries 2/	
Period	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1995	1,670	65,000	502	28,900	2,200	99,700
JanApr. 1995	_ 491	18,900	160	10,100	717	30,700
1995:						
April	170	5,900	39	2,340	210	8,840
May		6,770	41	2,390	187	9,550
June	127	5,180	40	2,420	167	8,150
July	148	6,400	61	3,660	210	10,500
August	136	6,520	41	2,130	177	8,890
September	136	5,470	41	2,430	177	7,970
October	158	5,910	41	2,120	199	9,020
November		5,250	38	1,970	189	7,510
December		4,020	40	1,800	174	6,870
1996:						
January	96	4,780	18	781	135	7,070
February	96	4,140	37	1,910	150	7,080
March	93	2,480	37	1,720	130	4,680
April	82	2,220	37	1,990	119	4,660
Year to date	367	13,600	129	6,400	534	23,500

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Estimates based on information available from the Texas Comptroller of Public Account and company quarterly

<sup>3/</sup>Includes a small quantity from coking operations.

<sup>4/</sup> Includes data from Frasch producers.

<sup>2/</sup> May include other countries not listed.

<sup>3/</sup> Declared customs valuation.

### TABLE 3 U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

		Canada			Europe			Total 2	/
	_	Sulfur		_	Sulfur			Sulfur	
Period	Quantity	content	Value 3/	Quantity	content	Value 3/	Quantity	content	Value 3/
1995	1,660	544	61,500	95	30	710	1,900	619	66,500
JanApr. 1995	634	207	22,900	59	19	342	747	244	24,200
1995:	_								
April	136	45	5,540	(4/)	(4/)	3	174	57	5,870
May	141	46	5,640	` <u> </u>	ĺ Ź	57	149	49	5,740
June	106	35	4,650	13	4	49	120	39	4,740
July	121	40	4,300				125	41	4,750
August	121	40	4,630	14	5	101	148	48	5,120
September	147	48	5,350	10	3	111	162	53	6,250
October	147	48	5,290	(4/)	(4/)	2	185	60	5,790
November	136	45	4,900	10	` <u>á</u>	116	147	48	5,060
December	133	44	4,260				139	45	5,280
1996:	_		·						,
January	112	37	3,420	9	3	113	144	47	4,120
February	110	36	2,700	11	4	232	188	62	3,550
March	114	47	3,900	35	12	466	199	65	4,510
April	126	41	3,620	40	13	421	202	66	4,350
Year to date	462	161	13,600	95	32	1,230	733	240	16,500

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown. 2/ May include other countries not listed.

Source: Bureau of the Census.

TABLE 4 U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

	Su	ılfur	;	Sulfuric Acid		
				Sulfur		
Period	Quantity	Value 2/	Quantity	content	Value 2/	
1995	905	66,200	171	56	12,800	
JanApr. 1995	400	30,900	51	16	3,810	
1995:						
April	57	3,400	21	7	1,060	
May	129	8,400	16	5	1,040	
June	78	5,700	20	7	1,430	
July	13	2,330	18	6	1,170	
August	61	5,440	7	2	886	
September	10	1,580	16	5	1,110	
October	104	7,060	17	6	1,530	
November	51	3,690	11	4	1,050	
December	99	5,340	6	2	774	
1996:						
January	51	3,000 e/	13	4	1,370	
February	44	3,000 e/	6	2	805	
March	7	1,210	10	3	900	
April	120	2,590	7	2	938	
Year to date	222	9,800	36	11	4,010	

e/ Estimated.

Source: Bureau of the Census.

<sup>3/</sup> Declared customs valuation.

<sup>4/</sup> Less than 1/2 unit.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Declared f.a.s. (free alongside ship) valuation.

# TABLE 5 U.S. CONSUMPTION OF SULFUR 1/

### (Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1995	9,830	2,200	12,000
JanApr. 1995	3,200	717	3,920
1995:			
April	825	210	1,040
May	809	187	996
June	818	167	985
July	897	210	1,110
August	851	177	1,030
September	841	177	1,020
October	738	199	937
November	<del></del>	189	1,040
December	818	174	992
1996:			
January	833	135	968
February	771	150	921
March	828	130	958
April	778	119	897
Year to date	3,210	534	3,740

<sup>1/</sup>Data are rounded to three significant digits; may not add to totals shown.

TABLE 6 RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES, BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

### (Thousand metric tons)

	May 1996 p/ April 1996 p/		96 p/	Year to date	1996 p/	Year to date 1995 2/		
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	20	20	18	19	90	96	106	105
Natural gas	5	5	4	4	21	21	21	22
Total	24	25	23	24	110	117	127	127
PAD 2:								
Petroleum and coke	68	66	76	77	364	365	361	358
Natural gas	5	5	4	4	21	20	24	23
Total	73	71	80	81	386	385	385	381
PAD 3: 3/								
Petroleum and coke	283	280	274	293	1,300	W	1,160	W
Natural gas	330 4/	W	328 4/ r	/ W	1,660 4/	W	1,720 4/	W
Total	614	579 5/	601 <b>r</b> /	618 5/ r/	2,960	2,930 5/	2,880	3,170 5/
PAD 4 and 5: 6/								
Petroleum and coke	96	93	82 r/	87 r/	435	434	400	400
Natural gas	82	95	87	88	430	434	426	418
California	75	74	66	69 r/	340	340	307	309
Total	178	188	168	175 r/	866	868	826	818
Grand total	889	863	872 r/	898 r/	4,320	4,300	4,220	4,500

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data.

<sup>2/</sup> Calculated as shipments minus exports.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> May include revisions for prior months.

<sup>3/</sup> Includes Puerto Rico and the U.S. Virgin Islands.

<sup>4/</sup> Frasch production is included in the natural gas production to avoid disclosing company proprietary data.

<sup>5/</sup> Includes data from Frasch producers.

<sup>6/</sup> Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

# TABLE 7 COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

		1996		1995
	May	April	Year to date	Total
Production	10.50 p/	10.60 r/	10.40 p/	10.40
Shipments	10.20 p/	11.00 r/	10.40 p/	10.70
Exports of sulfur	NA	1.46	0.67	0.91
Imports of sulfur:				
Canada	NA	1.00	1.11	1.67
Mexico	NA	0.45	0.39	0.50
Total	NA	1.45	1.62	2.20
Exports of H2SO4	NA	0.09	0.11	0.17
Imports of H2SO4:				
Canada	NA	1.54	1.39	1.66
Europe	NA	0.49	0.29	0.17
Total 2/	NA	2.46	2.22	1.90
Consumption: 3/				
Domestic sources	NA	9.49	9.71	9.83
Imports	NA	1.45	1.62	2.20
Total	NA	10.90	11.30	12.00
Sulfur export values 4/	NA	\$22	\$44	\$73
Sulfur import values: 4/				
Canada	NA	\$27	\$37	\$39
Mexico	NA	\$54	\$50	\$58
Average	NA	\$39	\$44	\$43
H2SO4 export values 4/	NA	\$134	\$111	\$75
H2SO4 import values: 4/				
Canada	NA	\$29	\$29	\$37
Europe	NA	\$11	\$13	\$7
Average	NA	\$22	\$23	\$35

p/ Preliminary. r/ Revised. NA Not available.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Includes other countries not listed.

<sup>3/</sup> Because trade data was not available, May consumption was not determined.

<sup>4/</sup> Average value per ton for most recent data available.